

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	David McMorrow, Henrick Hansen and Tom McHale
Application No.:	10/087303
Filed:	February 28, 2002
For:	BALLOON FOLDING APPARATUS, METHODS AND PRODUCTS
Examiner:	Ryan J. Severson
Group Art Unit:	3731

Docket No.: S63.2N-9719-US01

APPEAL BRIEF

This is an Appeal Brief for the above-identified Application in which claims 21-25, 29, 30 and 39-40 were rejected in the Final Office Action mailed August 27, 2007. A response to the Final Office Action was filed on January 28, 2008. A Notice of Appeal was filed in this case on January 28, 2008.

This brief is submitted in accordance with 37 CFR. § 41.37. The fees required under 37 CFR § 41.20, and any petition for an extension of time required for filing this brief, are addressed in the accompanying Transmittal Letter.

A Table of Contents is included on page 2 of this document.

TABLE OF CONTENTS

Identification Page.....	cover page
(i) Real Party in Interest	3
(ii) Related Appeals and Interferences	3
(iii) Status of Claims.....	3
(iv) Status of Amendments	3
(v) Summary of Claimed Subject Matter.....	3
(vi) Grounds of Rejection to be Reviewed on Appeal	4
(vii) Argument	
Issue 1: Rejection under 35 USC § 102 over Dehdashtian et al.....	5
Dependent claim argued separately	8
(viii) Claims Appendix.....	10
(ix) Evidence Appendix.....	12
(x) Related Proceedings Appendix.....	12

(i) Real Party in Interest

The application is assigned to Boston Scientific Scimed, Inc. (formerly SciMed Life Systems, Inc.), One SciMed Place, Maple Grove, MN 55311-1566, a Minnesota Corporation and wholly owned subsidiary of Boston Scientific Corporation, One Boston Scientific Place, Natick, Massachusetts, 01760-1537, a Delaware Corporation.

(ii) Related Appeals and Interferences

No related appeals or interferences are pending.

(iii) Status of Claims

Claims 21-25, 29, 30 and 39-41 are pending in the application. Claims 1-20, 26-28, 31-38 and 42 have been cancelled.

Claims 21-25, 29, 30 and 39-40 stand rejected and are the subject of this appeal. Claim 41 has been allowed and is not involved in the appeal. Specifically, claims 21-25, 29, 30 and 39-40 are rejected under 35 USC § 102 over Dehdashtian et al. (US 6013092).

(iv) Status of Amendments

A Response After Final was filed on January 28, 2008, subsequent to the Final Office Action, which presented arguments but did not amend the claims, except for claims 39 and 41. Claims 39 and 41 were amended to correct minor clerical errors to place the application in better condition for appeal. There has been no indication that the minor amendments to claims 39 and 41 have been entered.

(v) Summary of Claimed Subject Matter

Independent claim 21 recites a medical balloon 104. The medical balloon 104 has a balloon wall, a contracted condition (see Fig. 12) and is expandable to an expanded condition (see Figs. 1, 2 and 13). When the medical balloon 104 is in its expanded state, the balloon wall has an inner surface facing inward and an outer surface facing outward (see Figs. 1, 2 and 13). The medical balloon 104 in its contracted condition has a central portion 112 and a plurality of

structures 124 extending from the central portion 112 and disposed thereabout. Each structure 124 comprises a base, wherein the base is a double layer of the balloon wall (see Fig. 12), a first wing 118a wrapped continuously in a first direction circumferentially away from the base and about the central portion 112 of the balloon 104 to and terminating at a first terminating end (see Fig. 12) and a second wing 118b wrapped continuously in a second direction, opposite the first direction, circumferentially away from the base and about the central portion 112 of the balloon 104 to and terminating at a second terminating end (see Fig. 12).

Independent claim 29 recites a medical balloon 104. The medical balloon 104 has a balloon wall, a contracted condition (see Fig. 12) and is expandable to an expanded condition (see Figs. 1, 2 and 13). When the medical balloon 104 is in its expanded condition, the balloon wall has an inner surface facing inward and an outer surface facing outward (see Figs. 1, 2 and 13). The medical balloon 104 in its contracted condition has a central portion 112 and a plurality of structures 124 extending from the central portion 112. The structures 124 each comprise a base, wherein the base is a double layer of the balloon wall (see Fig. 12), a first wing 118a extending continuously in a first direction circumferentially away from the base and around the central portion 112 to and terminating at a first terminating end (see Fig. 12) and a second wing 118b extending continuously in a second direction circumferentially away from the base and around the central portion 112 to and terminating at a second terminating end (see Fig. 12). There are a plurality of first wings 118a and a plurality of second wings 118b, wherein the first wings 118a and the second wings 118b extend around the central portion 112 in opposite directions.

Claim 25, which is dependent upon claim 21, recites that each second wing 118b of the structures 124 is in an overlapping relationship with a first wing 118a of an adjacent structure 124.

(vi) Grounds of Rejection to be Reviewed on Appeal

Issue 1: Whether the Examiner erred in rejecting claims 21-25, 29, 30, and 39-40 under 35 USC §102 over Dehdashtian et al. (US 6013092).

(vii) **Argument**

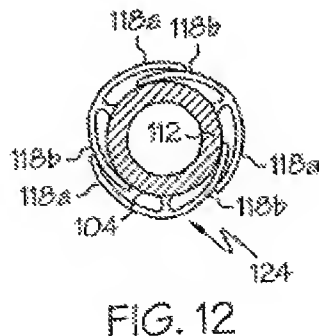
Issue 1: Whether the Examiner erred in rejecting claims 21-25, 29, 30, and 39-40 under 35 USC §102 over Dehdashtian et al. (US 6013092).

The Examiner erred in rejecting independent claims 21 and 29 and dependent claims 22-25 and 30 and 39-40 under 35 USC § 102 over Dehdashtian et al. (US 6013092) because Dehdashtian et al. do not disclose or suggest each limitation of at least independent claims 21 and 29.

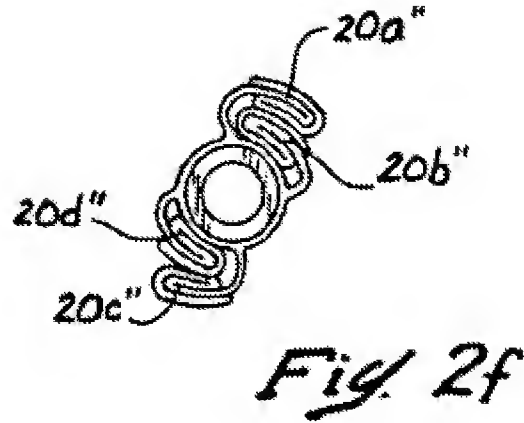
Independent claim 21 and claims dependent therefrom recite:

...each structure comprising a base, wherein the base is a double layer of the balloon wall, a first wing **wrapped continuously in a first direction circumferentially away from the base** and about the central portion of the balloon to and terminating at a first terminating end and a second wing **wrapped continuously in a second direction, opposite the first direction, circumferentially away from the base** and about the central portion of the balloon to and terminating at a second terminating end... (*emphasis added*)

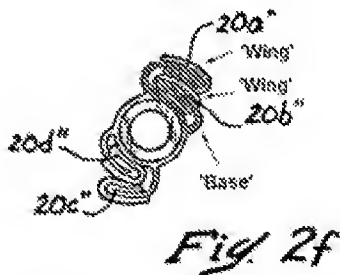
In response to a Restriction Requirement issued July 21, 2004, Applicant selected the species represented by figure 12. Figure 12 is shown below for the convenience of the Board. Independent claims 21 and 29 reads upon the figure.



The Final Office Action maintains that the features of claim 21 are disclosed by Fig. 2f (shown below) of Dehdashtian et al.



The Final Office Action does not provide a marked-up copy of Fig. 2f with the relevant portions highlighted in analyzing claim 21. Figure 2f below is highlighted according to Applicant's interpretation of the rejection. To the extent, for the sake of argument, that the Final Office Action considers the highlighted portions below of Fig. 2f to constitute the 'base' and 'wings', the 'wings' are *not* 'wrapped continuously in a first direction circumferentially *away* from the base', as required by claim 21. Rather, they are wrapped in an inward direction toward what is represented in the rejection as the 'base'.



Marked up copy of Fig. 2f of Dedashtian

The Final Office Action dated August 27, 2007, starting at line 17, on page 2 states:

end of wing 20b'' and the central portion.}, wherein the base is a double layer of balloon material, a first wing 20b'' or 20d'' wrapped continuously in a first direction (counter clockwise) away from the base (i.e. away from a portion of the base) about the central portion of the balloon to and terminating at a first terminating end (e.g. the left end of 20b'' as seen in figure 2f) and a second wing 20a'' or 20c'' wrapped continuously in a second direction (clockwise) away from the base (i.e. away from a portion of the base) about the central portion of the balloon to and terminating at a second terminating end (e.g. the right end of 20a'' as seen in figure 2f) as described in col. 5, lines 6-16. As to claim 23, when there are six longitudinal furrows

(highlighting added)

The Examiner has improperly imported into the claims the language 'away from a portion of the base'. This language is not present in the claims. The so-called 'wings' in figure 2f, as understood, are not 'wrapped continuously in a first direction circumferentially away from the base'. Therefore, claim 21 and its dependent claims are patentable over Dehdashtian et al.

The rejection fails in part because of its interpretation of elements in claim 21 to Fig. 2f of the cited reference are inconsistent with the specific claim language of claim 21. Claim 21 requires that each of the structures 124 extending from the central portion 112 comprise a base, wherein the base is a double layer of the balloon wall. In interpreting and applying claim 21 to figure 2f of the cited reference, the rejection states that one of the "structures" is at the top right portion of figure 2f and includes wings 20a'' and 20b'' (page 2, lines 9-10, of the Final Official Action). It is further stated in line 13, on page 2 of the Final Official Action, that each structure comprises a base, *wherein each base comprises two portions*. As an example, it is stated that "the base at the top right portion of figure 2f includes a portion between the left end of wing 20a'' and the central portion and another portion between the right end of wing 20b'' and the center portion. The rejection further states that the "base" is a double layer of balloon material.

This is a misapplication of the claim language of claim 21 to figure 2f of the cited reference. It is admitted in the rejection that, in applying the claim language of claim 21 to figure 2f, one structure is represented by "wings" 20a'' and 20b'' and that the "base" comprises *two*

portions. It is Applicant's interpretation of the rejection, that it is asserted in the rejection that the base in figure 2f includes the initial extensions of the both wings 20a" and 20b" from the central portion of the balloon. This is inconsistent with the requirement in claim 21 that the "base is a double layer of the balloon wall". The base indicated in the rejection and as illustrated in the above marked up copy of figure 2f has two extensions, *each* being a double layer of the balloon wall, extending from the central portion. Essentially, in an attempt to read claim 21 onto figure 2f, the rejection uses the bases of two different structures extending from the central portion. These two different bases form wings 20a" and 20b". It can not be said that figure 2f discloses "a" base that is a double layer of the balloon wall, wherein each structure has, in addition to the base, a first wing and a second wing where both of the wings extend circumferentially around the central portion *away* from the base in opposite directions, as required by claim 21.

Therefore, Applicant asserts that Dehdashtian et al. do not disclose or suggest each limitation of claim 21, and that claim 21 is patentable over Dehdashtian et al. under 35 USC § 102. Claims 22-25 and 39 depend from claim 21 and are patentable over Dehdashtian et al. for at least the reasons discussed with respect to claim 21. Accordingly, Applicant requests that the Board reverse the rejection of claims 21-25 and 39 under 35 USC § 102 over Dehdashtian et al.

Claim 29 and its dependent claims 30 and 40 recite:

...a first wing extending continuously **in a first direction circumferentially away from the base** and around the central portion to and terminating at a first terminating end and a second wing extending continuously **in a second direction circumferentially away from the base**...wherein the first wings and the second wings extend around the central portion in opposite directions (*emphasis added*)

Claim 29 and its dependent claims 30 and 40 are patentable over Dehdashtian et al. at least for the reasons discussed above with respect to claim 21. Reversal of the rejection is respectfully requested.

Dependent claim 25

Claim 25 requires that "each second wing of the structures is in an overlapping relationship with a first wing of an adjacent structure." As discussed above, in reference to figure 2f of the cited reference, the rejection states (see page 2, lines 8-12, of the Final Office Action)

that one “structure” is at the top right portion of figure 2f and includes the ‘wings’ 20a” and 20b” and another “structure” is at the bottom left portion of figure 2f and includes the ‘wings’ 20c” and 20d”.

If ‘wings’ 20a and 20b are part of a single structure, then there is no overlap with wings of an adjacent structure. On the other hand, if each ‘wing’ is considered a separate structure, the so-called structure does not have two wings as recited in the claims. As such, reversal of the rejection is respectfully requested.

Conclusion

It has been shown above that Dehdashtian et al. do not disclose each and every element of independent claims 21 and 29. As such, it is respectfully requested that the anticipation rejection under 35 USC §102 be reversed.

Respectfully submitted,

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(viii) Claims Appendix

21. A medical balloon, wherein the medical balloon has a balloon wall, a contracted condition and is expandable to an expanded condition, wherein, when the medical balloon is in its expanded state, the balloon wall has an inner surface facing inward and an outer surface facing outward, the medical balloon in its contracted condition having a central portion and a plurality of structures extending from the central portion disposed thereabout, each structure comprising a base, wherein the base is a double layer of the balloon wall, a first wing wrapped continuously in a first direction circumferentially away from the base and about the central portion of the balloon to and terminating at a first terminating end and a second wing wrapped continuously in a second direction, opposite the first direction, circumferentially away from the base and about the central portion of the balloon to and terminating at a second terminating end.

22. The medical balloon of claim 21, wherein there are at least three structures extending from the central portion.

23. The medical balloon of claim 22 wherein the first and second wings alternate with one another about the central portion of the balloon.

24. The medical balloon of claim 23, wherein the structures are T-shaped structures extending from the central portion of the balloon.

25. The medical balloon of claim 23 wherein each second wing of the structures is in an overlapping relationship with a first wing of an adjacent structure.

29. A medical balloon, wherein the medical balloon has a balloon wall, a contracted condition and is expandable to an expanded condition, wherein, when the medical balloon is in its expanded condition, the balloon wall has an inner surface facing inward and an outer surface facing outward, the medical balloon in its contracted condition having a central portion and a plurality of structures extending from the central portion, the structures each comprising, a base, wherein the

base is a double layer of the balloon wall, a first wing extending continuously in a first direction circumferentially away from the base and around the central portion to and terminating at a first terminating end and a second wing extending continuously in a second direction circumferentially away from the base and around the central portion to and terminating at a second terminating end, such that there are a plurality of first wings and a plurality of second wings, wherein the first wings and the second wings extend around the central portion in opposite directions.

30. The medical balloon of claim 29 wherein the structures are T-shaped or V-shaped.

39. The medical balloon of claim 21, wherein, when the medical balloon is expanded to its expanded condition, the first wings and second wing disappear.

40. The medical balloon of claim 29, wherein, when the medical balloon is expanded to its expanded condition, the plurality of first wings and the plurality of second wings disappear.

(ix) Evidence Appendix

None

(x) Related Proceedings Appendix

None.